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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,196	01/29/2001	Masashi Sato	106872	6868

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EXAMINER	
THOMPSON, CAMIE S	
ART UNIT	PAPER NUMBER
1774	4

DATE MAILED: 05/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)
	09/770,196	SATO ET AL.
	Examin r	Art Unit
	Camie S Thompson	1774

-- The MAILING DATE of this communication appears on the c ver sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 9-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-4, drawn to an olefin based resin composition, classified in class 523, subclass 300+.

II. Claims 5-8, drawn to a method for a preparing olefin based resin composition, classified in class 526, subclass 351.

III. Claims 9-12, drawn to an electrical wire, classified in class 428, subclass 375.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, an olefin based resin composition can be prepared from polyethylene.

Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, an olefin-based composition can be used as household and industrial articles that are molded into films, sheets and pipes.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different

functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, electrical wires can be prepared glass fibers.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Joel Armstrong on 5/22/02 a provisional election was made with traverse to prosecute the invention of Group III, claims 9-12. Applicant in replying to this Office action must make affirmation of this election. Claims 1-8 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

7. Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "having" in claim 9 is a relative term that renders the claim indefinite. The term "having" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear whether "having" is intended to denote an open or closed transitional phrase. Please replace "having" with an open transitional phrase indicator such as "comprising", provided the transitional phrase in indeed intended to be open.

8. The term "substantially" in claim 9 is a relative term that renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claim 9 does not distinctly point out that there is no other resin component present in the composition.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al., U.S. Patent No. 4,772,959.

Inoue discloses a flame retardant olefin polymer composition that can be used to provide insulation for electrical wires as per instant claim 9 (see abstract and column 2, lines 8-11). Inoue also discloses that the resin composition comprises (a) 60% to 90% ethylene-α-olefin copolymer wherein the α-olefin is propylene (b) 1% to 40% maleic anhydride modified polypropylene and (c) 5% to 20% by weight styrene-butadiene rubber modified with 0.05-10% maleic anhydride where components a, b and c are 100 parts as per instant claims 9-11 (see column 2, column 7 and column 8, lines 35-43). In addition, the reference discloses magnesium hydroxide that is surface treated with a an aminosilane and is in the amount of 20 to 200 parts by weight, preferably 40 to 150 parts by weight, based on 100 parts by weight of resin as per instant claims 9, 10 and 12 (see column 8, lines 63-66 and column 2, lines 52-64). The reference also discloses that the ethylene-propylene copolymer has a melt flow rate of 1.9-g/10 min as per instant claim 9 (see column 11, line 9). The reference meets all limitations of claims 9-12.

Claim Rejections - 35 USC § 103

11. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al., U.S. Patent No. 5,561,185 in view of Icenogle et al., U.S. Patent No. 4,853,154.

Hashimoto discloses an electric wire with a cover layer formed on the conductive core wherein the cover layer is compose of a fire-retardant resin composition comprising (a) 20 % to 60% by

weight polypropylene-series resin selected from propylene homopolymers and ethylene-propylene copolymers with a propylene content of at least 50% and a melt flow rate of 0.1 to 10g/10 min (b) a metal hydrate such as surface treated magnesium hydroxide that is 50 to 180 parts by weight based on 100 parts by weight of resin and a 5 % to 15% styrene based polymeric elastomer as per instant claims 9, 10 and 12 (see abstract; column 3, lines 30-68; column 4, lines 1-33 and column 6.). Hashimoto does not disclose using a modified polypropylene or modifying the styrene-based elastomer with an acid anhydride. Icenogle teaches an electrically conductive wire coated with a flame retardant resin comprising a maleic anhydride functionalized polypropylene and a styrene based polymeric elastomer coupled with a maleate residue as per instant claim 9 and 11 (see column 2, lines 60-68 and column 3, lines 9-68 to column 4, lines1-40). It would have been obvious to one of ordinary skill in the art to use a polypropylene modified with maleic anhydride because modified polypropylenes have a high melting point that increases the flame retardancy of the composition. It would have been obvious to one of ordinary skill in the art to use 0.1-10% by weight of maleic anhydride so as to couple the polymers so that they are blocked and not too large to reduce fire retardancy.

12. Claim12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al., U.S. Patent No. 5,561,185 in view of Icenogle et al., U.S. Patent No. 4,853,154 and in further view of Rolland, U.S. Patent No. 4,948,669.

Hashimoto and Icenogle disclose olefin based resin compositions as insulation or covering for wire with an electrically conductive core with features relied upon above. Neither reference discloses the type of surface treatment used on the magnesium hydroxide. Rolland teaches flame

retardant ethylene polymer blends that are used for wire insulation. Rolland also teaches silane-coupling agents treated onto magnesium hydroxide that are vinyl, amino or epoxy silanes (see column 3, lines 1-15). It would have been obvious to one of ordinary skill in the art to use silanes as a surface treatment being motivated by the coupling agent improving the tensile strength of the resin composition.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (703) 305-4488. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (703) 308-0449. The fax phone numbers for the Group are (703) 872-9310 {before finals} and (703) 872-9311 {after finals}.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700